

The AGRICULTURAL EDUCATION *Magazine*

VOLUME 34

JULY, 1961

NUMBER 3



*Featuring—Agricultural Education
at the Crossroads*

The Agricultural Education Magazine



A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

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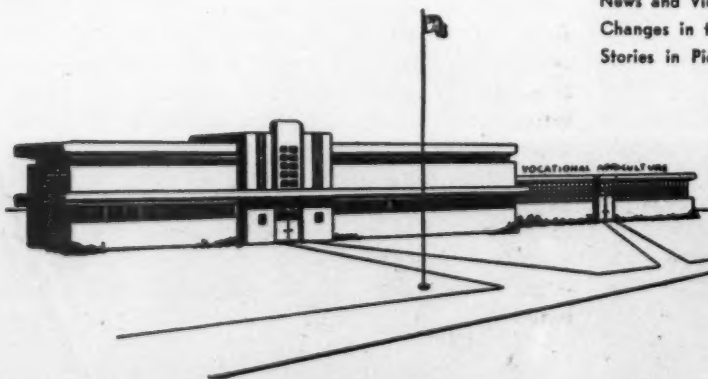
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Second-class postage paid at Danville, Illinois.

Editorials

STALLED AT THE CROSSROADS . . .

ALFRED H. KREBS, Teacher Education, University of Illinois

Although there are many knotty problems facing programs of vocational education in agriculture, there are none more dangerous to the programs than (1) the confused thinking regarding the high school program and (2) the unrealistic administrative regulations governing the adult farmer programs. Until these two issues are resolved, vocational agriculture will remain "at the crossroads."

The first problem, that of the confused thinking regarding the high school program, is critical from two standpoints. First, the many conflicting points of view expressed have raised doubts in the minds of teachers regarding the stability of the vocational agriculture program. Teachers have become uneasy regarding the future. Some teachers have left the profession while many others have had their attention diverted from the task of developing programs of vocational agriculture to fruitless emotional arguments about having vocational agriculture fill all agricultural education needs at the high school level. Secondly, the heated debates over the "related occupations" issue have diverted valuable time and energy from serious studies of changes needed in the vocational agriculture program to keep it abreast of changes in educational thought and agricultural production practices. While agricultural educators have fought among themselves, other forces have been almost unopposed in their efforts to downgrade agriculture and vocational education in agriculture.

The second problem, that of unrealistic administrative regulations governing the adult farmer programs, is potentially more critical than the first problem. The ten-meeting and minimum-enrollment requirements have put teachers in the position of being denied administrative approval for needed adult farmer programs. There are increasing indications that the public schools will not be the adult farmer education centers in the future unless changes in the regulations are made. If adult farmers find it necessary to turn elsewhere for needed educational programs, teacher time will be increasingly diverted to non-agricultural uses in the schools. A newly developing factor in adult farmer education is the tendency to say that vocational agriculture teachers are not specialized enough to teach adult farmers. How can a teacher be up-to-date in his high school agricultural instruction and be out-of-date teaching adults about the same agricultural enterprises? It could well be that the "not specialized enough" excuse is a reaction

From the Editor's Desk

THE VALUE OF CRITICISM

Many people have expressed concern over the amount of criticism which is being leveled at vocational agriculture today. Too many people are afraid of such criticism. Those of us in the field of agricultural education often feel shocked or are filled with "righteous" indignation when people say they do not care for our program. It would seem that *the time to get alarmed about criticism is when it stops*. When each of us gets to the place that we are self-satisfied and complacent, that is the time to get alarmed. When we cease to be concerned and actively critical about education, it is cause for alarm.

Of course, criticism is of two types. We understand and often welcome constructive criticism and usually try to use it in evaluating and in projecting plans. However, destructive criticism is another matter! When someone says something bad about the total program, we have a tendency to go on the defensive, either by making excuses, by arguing, or by keeping completely silent. The writer suggests that we can learn as much from "destructive" criticism as we can from "constructive." In either case, we need to fully realize that there are adjustments that must be made, new directions to be taken, and new areas to be developed.

Ours is a growing field of study, one that is less than half a century old, so it is natural that there are "growing pains." With all the pressures we tend to become confused and bewildered. We need desperately to redirect and redefine our thoughts. It was with this idea in mind that the theme for this issue was chosen. It is not a new theme for the *Agricultural Education Magazine*, but it is a vital one at this time, particularly with regard to federal legislation. Things will be done in Congress—with or without our help. Vocational agriculture is truly at the crossroads in many respects.

The editor asked several people connected with the field of agricultural education to write their ideas concerning direction. It is difficult for a writer to project more than one major idea in an article, but the cumulative effect is much greater. Several articles on as many different ideas make a more comprehensive presentation. Still other articles were secured from people not directly connected with the field. Since many of the articles were written in editorial form, they have been placed on a second and third editorial page, whereas only one is usually included in each issue.

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Stalled . . .

to the restrictions limiting teachers to one kind of adult farmer education program.

Vocational agriculture programs have changed in content and method over the years to provide a continually improving instructional program for high school boys, young farmers and adult farmers. Current efforts to create a favorable image of agriculture in the mind of the public should provide a climate favorable to strengthening programs of vocational education in agriculture. We can strengthen vocational agriculture by making the needed changes in administrative regulations and by developing a common philosophy of vocational education in agriculture or we can remain "stalled at the crossroads" until the program is declared defunct. □

Value of Criticism

Many years ago the writer read a short quotation which summarizes fairly adequately his feelings about the value of criticism. He has forgotten the author's name, but the quotation is this: "Life is like a grindstone. It depends upon the stuff you are made of whether it grinds you down or polishes you." □

WHEN I THINK OF FFA

L. V. HIGHTOWER, Assistant Principal,
Missouri City, Texas

When I think of FFA, I think of feeding millions of Americans with the best beef, mutton, chickens, vegetables, and other foods in the world.

I think of honest, clean work that makes the body and spirit wholesome and happy.

I think of good boys all over the United States banded together to do a job for the present and future of America, boys who mix in many pleasures with their work, boys that are close to God and nature through their work.

I also think of their fine leaders, men who have dedicated their lives to see that America has all these things.

May all our citizens look to the FFA for examples in their particular fields. □

(Editor's note: Mr. Hightower's guest editorial was selected from the Missouri City, Tex., Vo-Ag Newsletter, Vol. 2, No. 4, Mar., 1961.)

THE COVER PICTURE

One of the most important tasks in vocational agriculture is keeping the public informed about the educational activities of the program. This often involves such activities as goodwill calling and seeking the counsel and assistance of key people. In the photo, the officers of the Kansas Association of Future Farmers of America ask Governor Anderson to make an official proclamation for Future Farmers of America week in Kansas as they explain to him some of the features of the program. Left to right in the photo are:

Dr. R. J. Agan, Kansas State University, Assistant Advisor to the Collegiate Chapter; Mervin Hunt, State President, Freshman in Animal Husbandry at Kansas State University; Roger Aberle, State Treasurer, Freshman in Veterinary Medicine at Kansas State University; Gene Raymond, State Secretary, Freshman in Animal Husbandry at Kansas State University; Mr. C. C. Eustace, Advisor to the Kansas State Association of Future Farmers; Governor Anderson; Dallas Kibbee, State Sentinel Farmer, Osage City, Kansas; Larry Richardson, State Vice-President, Freshman in Agriculture at Kansas State University, and Darryll Johnson, State Reporter, Freshman in Agriculture Economics at Kansas State University. □

Direction-Finding Needed

CAYCE SCARBOROUGH, Teacher Education, North Carolina

Change Is Inevitable

This statement has become a truism. Even the most conservative people admit that change is the order of the day. It does not necessarily follow that all change is "good." But change there will be. If this is true, then it would apply to Agricultural Education.

Anyone who has any professional interest wants to have some influence on his profession. If we cannot prevent change in Agricultural Education then our best hope for having any effect on the program is to try to prevent change in Agricultural Education by trying to affect the rate of change by speeding or slowing the process.

Perhaps the most fruitful way to influence change is to try to help the *direction* of change. This article will be concerned with direction-finding in Agricultural Education, pointing out some trends and some needs as seen by the writer.

Efforts Recognized

The argument for the need for more direction-finding in our profession is not original with this writer. A number of studies, articles, programs and conferences have resulted from a feeling of need for new direction. The leadership in Agricultural Education in some states has involved

other educational leaders and laymen in planning for needed changes in direction for programs in vocational agriculture. In spite of these efforts it is the opinion of this writer that we in Agricultural Education have not distinguished ourselves as leaders in seeking needed changes in vocational agriculture. On the contrary there is considerable evidence that some of us have been more concerned with "holding everything," not even being willing to adjust the language of 1917 to a new age. (Even the Bible scholars make such adjustment for better understanding. However, some people will not accept such "meddling." One



preacher burned a copy of the Revised Standard Version in the pulpit to demonstrate his nonacceptance. A similar reception on the part of some might await a revised version of the Smith-Hughes Act.)

Concerted Action Needed

As indicated, much effort has been made in direction-finding. However, much effectiveness has been lost because the efforts have had little or no connection. A concerted effort is needed. Some interested group needs to be given the directive and the time to make such a cooperative effort. They would combine the findings and recommendations of all recent efforts noting missing areas in an adequate direction-finding study. The group would involve people at every level of vocational agriculture. Research in other fields would be studied and implications used. The final result would be a printed document on "Goals for Vocational Agriculture, 1965-1975."

Again this idea is not original with this writer. Such a thing has been done to some extent several times in

the past. Two such publications have been "Vocational Education in the Years Ahead" and "Educational Objectives in Vocational Agriculture." However, the publication needed now as a guide for local planning would be much more comprehensive than either of the publications named.

It is difficult to see why concerted action is avoided. For example, a resolution to name a committee to begin immediately to revise the monograph "Educational Objectives in Vocational Agriculture" was passed unanimously by state supervisors and head teacher trainers in conference in Chicago in March, 1959. Apparently the committee has not yet been named.

Vo-Ag Is Changing Anyway

It should be clear that the inevitability of change applies to vocational agriculture. We may not change enrollment policies but new developments in guidance and larger schools will do the job for us. We may not include other forms of adult education such as community development, as part of the "regular vo-ag

program," but the local people will. We may insist that the Ag Teacher stay in his community all the time rather than going back to the college regularly, but the modern farmer will look elsewhere for his educational needs. It's a question of leading, following or dropping out.

Any effective program of vocational agriculture is an educational program based upon the socio-economic needs of the local people. How can an adequate program be developed for the present and the years ahead without clear direction?

Let's put our best thinking together in a concerted effort to determine the direction of Agricultural Education in the years ahead. It may be later than we think. For example, wouldn't it be good if we had such a document on goals as advocated here for the information of the National Task Force being organized to review and evaluate vocational education? Note that the purpose of this Task Force is stated as, "improving and redirecting this forty-four year old program."

How can we get concerted action? □

The Future for Education in Agriculture

J. C. ATHERTON, Teacher Education, Arkansas



It seems that we are in a period of troubled and unstable times. Many forces are at work—and often with aims which are at cross-purposes with those of other groups. Various elements each have goals which are not always clearly defined. In fact, it seems that everyone is shooting at something. Our national government is shooting for full employment and an end to the recession; the Russians are shooting at other planets; different components of our society are shooting at diverse targets; and it seems that Lumumba has been shot already.

Where does agricultural education fit into the national picture and where is its future? This is a good question and the answer one gives will be based partially upon his own personal philosophy. It seems, however, that it is imperative for us to project our

program into the years immediately ahead from a philosophic standpoint as well as a realistic one.

First, let us review the present status of agricultural education. Then we are in a better position to voice opinions relative to its place in future educational policies and programs. Agricultural production in the United States has come a long way from the time it required 85% of our work force to provide our domestic needs in the fields of food and fiber. Now slightly over ten percent do the same job and leave us *blessed* with healthy surpluses. Education and technology have been responsible largely for these gains. Agricultural education has been a prime factor in the improved production of our farms. National farm policy, although not always wise, has been determined largely by the farm bloc in the Con-

gress. As time has elapsed, several pressing problems have tended to cloud the educational picture in the field of agriculture. And, our ability to cope with them and evolve sound programs will be a deciding factor in determining the future of agricultural education in the United States.

A brief examination of some of these knotty problems seems worthwhile:

1. A surplus of food is not a curse, but a blessing even if it does pose problems. Is not this preferable by far to a lack of sufficient food and to hunger? Only by continued improvements in production have we managed to stay ahead of the needs of our ever increasing population. Currently, we have 6,000 new mouths to feed daily. As our numbers continue to grow more food and fiber

will be required to meet their desires and needs. Better methods and higher production come only from informed producers.

2. The percentage of our total population engaged directly in farm production has continued to decline for many years until it now comprises a relatively small portion of our total work force. However, on the average, four of every ten workers are employed in some phase of agriculture. A labor force of over 25,000,000 is far from insignificant. Most, if not all, of these individuals would find beneficial a farm background and some educational experiences in agriculture.

3. Farm policy is being formulated to a greater degree by individuals and groups who are not well versed in agriculture. The farm bloc does not have the influence it once had in our national Congress. The portion of our population being reared on farms is dwindling. And it seems that we have not done a very effective job of keeping the public adequately informed with reference to farm matters.

4. Through an historical accident we have majored on the program of high school vocational agriculture rather than providing a complete program of agricultural education for the great mass of our population. While being wholeheartedly in favor of vocational agriculture, it seems to me that we are very nearsighted when we continue to ignore largely the greater field of agricultural education.

5. The national emphasis on science, or rather certain aspects of it, has and is having a noted impact upon high school programs in agriculture. *It seems that someone has overlooked the fact that agriculture is a field of science and needs scientists in a wide variety of categories.* This emphasis on science is making it exceedingly difficult to enroll a fair share of the "better" or more academically talented pupils in agricultural studies. There seems to be a carryover of this problem into the institutions of higher learning also.

Now let's go back to the original question—the future for education in agriculture. To a considerable extent, the key to the problem is in the hands of the group of us who have dedicated our talents to use in this area. We have three courses of action open to us. First, we can stand by idly and let nature take its course, hoping wistfully for the best. A second

choice might be to defend with vigor our present program and our traditional approach to it. Or, another course of action could be one of surveying the field, determining basic needs in agricultural education and then putting into action a program designed to care for these needs. I personally choose the latter approach. There is an old military maxim which states that the best defense is a vigorous offense. This may apply equally well in our field of endeavor.

There will be a continual need for education in the field of agriculture. The transmission of the culture from one generation to the next requires that we inform each succeeding generation about what we have learned in this field. An improvement in our standard of living is a result of increased production per man hour expended. This comes about as a result of better "know-how," which is the product of education. As our population increases, which it is doing at an accelerated pace, more food and fiber is required to meet minimum needs. This will force us to produce higher yields which are the result of application of improved methods—the product of education.

Policies relating to the "farm problem" are being made perennially by the Congress. In this policy-making process the voice of nonfarmers is louder than that of the farmers. There are so many more nonfarmers. A well informed electorate is essential for sound decisions in a democratic society. It seems imperative that knowledge of agriculture be not left to chance and the "pick-up" method for this large segment of our population.

The future of agricultural education is shining brightly although it is obscured to a large extent by clouds of nearsightedness, indecision, indolence, and indifference. By taking the initiative we can cause this light to shine more clearly through the clouds, and the field of agricultural education provide the service that is so badly needed by our society today. Assuming that we are desirous of putting our best foot forward and developing the type program that is needed, the future looks quite promising. It will entail concerted effort as well as individual initiative. We will be successful to the extent that we accept the challenge and provide instruction that is needed and of which the general public can be proud.

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IS IT VOCATIONAL AGRICULTURE?

JAMES A. DURHAM,
Assistant Principal,
Ferry Pass Junior High School,
Pensacola, Florida

Among the schools familiar to this writer, only a handful offer any type of vocational training for their students. With this limited knowledge about vocational agriculture, the writer is very hesitant with the opinions to follow. He realizes that he may not know enough situations. However, most everyone in the United States is familiar at least to some extent with the program, if through no other means than "hearsay." And "hearsay" information is being expressed and usually has some fact to get the idea started in the first place.

For the most part, the schools which I have known which boast of a vocational agriculture program are offering little more than a general shop program. In many of these vocational "agriculture" programs there is little which resembles a true agriculture curriculum. An observer sitting in on a class or shop would find it difficult to call the program an agriculture program. This writer's opinion is *not* that these situations are bad but that their classification should be clarified and fitted to the needs of the community. If their activities consist chiefly of woodworking activities, leather craft, gardening, drafting, etc., they should be classified accordingly and not attempt to deceive the public and accept federal funds under false pretenses. Disguising the curriculum with a cloak of vocational agriculture does not make it "agriculture."

The belief of this writer concerning the feasibility of vocational subjects remaining in our curriculum is that they should not only remain but be expanded to offer vocational opportunities to more children. Many schools offer, in addition to vocational agriculture and home economics, such courses as photography, electronics, communications (radio and television), typing, auto mechanics, and welding, to mention only a few. These courses are in addition to the usual academic courses. Unfortunately, the schools able to offer these added vocational subjects are too few in number.

It seems all too evident that a child, whether he may become a professional

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The Future of Ed. . . .

Several areas that must be given immediate attention are recruitment, guidance, relationships and provisions for a complete continuing program of agricultural education. These will insure that a balanced comprehensive program is provided in which education in agriculture is provided for those who have no intention of entering agriculture vocationally as well as for those who will earn a livelihood in this field. The general public will be aware of the program and of their needs in this field and will assist in preparing a long range policy relating to it. I have the faith in those engaged in agricultural education and the American public in general which leads me to believe that we will not dissipate the gains which have been made in agricultural education, but that we will use these as points of departure to greater, more comprehensive programs in education in agriculture. □



PRINCIPLES OF PLANT BREEDING

by R. W. Allard. John Wiley and Sons, New York, 354 pp., 1960. Price \$9.00.

This book is a college text written primarily for undergraduate students in agriculture.

The book is based on the idea that there is a basic unity to the method of breeding self-pollinated species on the one hand and cross-pollinated species on the other. This unity is very important. The author, therefore, emphasizes the biological principles which lead to this basic unit of methods.

It deals with principles rather than breeding procedures related to specific crops. Some specific examples are used to avoid abstractness.

Subject matter is broken down into nine major areas. An attempt was made to enable each section to stand on its own.

Dr. Allard received his Ph.D. degree in genetics from the University of Wisconsin in 1946. That same year he joined the faculty at the University of California, at Davis, where he is now Professor of Agronomy.

Herbert Bruce, Jr.,
Teacher Trainer,
University of Kentucky

Direction in Vocational Education

In Farming Occupations

V. E. NYLIN, Teacher Education, Wisconsin State College, Platteville

The current press is full of articles purporting to portray the true and only education our youth should have. So many misunderstandings are shown that it is evident that vocational education should be on the alert to safeguard the true values in education.

It is generally accepted and agreed that vocational education is a kind of education. But as to what education is vocational and what the significance of vocational education may be—there still continues much confusion and conflict of opinion. The lack of common understanding of the meaning and significance of vocational education becomes a matter of great importance.

The support for various forms of education is largely determined by the sanction of laymen, and what the forms shall be is largely determined by the philosophy of education held by the educators.

It is too often overlooked that as a person changes in the way he thinks, acts and feels—he learns, and this learning is both an activity and a product.

Since so many situations arise:

- 1) A true vocation at one period in the life of an individual may not be such at another.
- 2) A vocation neither is nor ought to be in all cases a "life career."
 - a) Experience in one vocation may prove an asset in another vocation, while in some it may prove to be a liability.
 - b) Variation is the most characteristic aspect of a vocation and its training to a person's "life career."

Here we are dealing in the oldest form of education—vocational education, yet we hesitate and become confused when the problems appear difficult.

Did American agriculture progress by turning backward or by returning

to apprenticeship? With the importance of agriculture in American economy,^{1, 2} does it appear to be good judgment to abandon progress or forward-moving in vocational education?

We can probably fall back from the atomic age to the age of the sickle in one step far easier than we can make adjustment from the sickle period to the atomic age in one step, and there are those who believe it can be done.

The acquired steps come by learning, and organized learning in a program of education is still the most efficient method we have. Why not hold fast to this tried landmark of education and procedure that furnishes the basis of our programs in Agricultural Education?

The program of education preparatory to vocations that significantly affects the well-being of the many, such as medicine, teaching, and agriculture, should be given *first emphasis and priority*.

In complex vocations of professional character such as are found in the farming occupations, the economic pursuit factors increase in importance and require extra concern for training procedures.

Is there some short cut whereby our society could provide well-trained efficient producers without the years of experience in farming programs, where the ideal method of education for vocation is "education in vocation." No situation in education equals these programs developed in agriculture in the educational opportunities for training. In learning, then, the prospective trainee in the vocation should deal with facts as the producer deals with them and with the producer's attitude of mind.

This implies progress in new techniques of instruction, continued evaluation of subject matter, and instructive situations that keep pace with modern advances in the farming occupations.

The program of vocational education in the farming occupation has proven itself beyond doubt. Therefore it is imperative:

1. To continue to develop our youth to become efficiently vocationally adjusted.
2. To continue programs that prepare our surplus youth to enter new training programs with preparatory training for related occupations.
3. To hold values of the present program, increased aids should be made because of the importance of occupation in the economy and the peculiar scatter of trainees area-wise.
4. To safeguard and develop sources of leadership in rural life.
5. To remember that favorable outcomes far outweigh any challenges that have so far been made against the program and to urge that continued use of the most valuable aspects of the program should be continued.

¹Cooper, M. W.—*What Are the Facts?* Speech at Conference of School Administrators in Wisconsin, Fall 1960.

²Nielsen, Duane M.—*Need for Vocational Education*, Division of Vocational Education, Office of Education, U. S. Dept. of H.E. & W., Washington. 1961.

Is It Voc. Agr.? . . .

man or a laborer, needs to learn to use his hands in the execution of some skills. The individual may never use the acquired skills for employment, but from the vocational program may come a means for emotional outlet and creative expression. It is doubtful, for instance, that anyone would disagree that an emotional outlet of some type is necessary for every person in our present-day society in order to function properly as a sound, emotionally balanced individual. For this and other reasons, I believe that the vocational programs should not only remain in our schools but be expanded so that the interests of more children can be stimulated.

As one method of facilitating the proposed expansion program, the schools should re-evaluate their vocational objectives in light of current vocational needs. If inadequacies and inconsistencies are uncovered, immediate corrective measures should be taken. □

Vocational Agriculture—

Progressing or Regressing?

ROBERT WITMER, Vo-Ag Instructor, Gladbrook, Iowa



During this time of Sputniks, Pioneers, Atlases, Nikiis, etc., much attention has been directed to the field of science and technology. At the same time, much publicity has been given to the annually decreasing farm income. This leads some to think that there is no opportunity for those trained in agriculture. It is a field which will decrease in importance.

If it does, on what will we live? Pills? I hope not!! Compare, for instance, the flavor and enjoyment of your supper this evening to the delightful experience of swallowing a capsule! I am sure man will not soon give up his normal meals for pills.

If this is true, then who will raise the vegetables and meats we all enjoy? Who will produce the extra food products which will be needed by our rapidly growing population? Many of them will be today's Future Farmers of America and today's vocational agriculture students.

How many times have you heard it said, "The young man of today cannot get started in farming"? It is not true! And, "You can't make a profit in farming today." This also is not true!! Many, not all, of today's Future Farmers look forward to their

opportunities to prove these statements.

Last year the Iowa Vocational Agriculture Teachers Association conducted a survey. They contacted ninety schools in Iowa who have had continuous vocational agriculture programs from 1939 to 1959. Thirty-one of these schools took part in the survey. There were over 2497 student records to be summarized. Of that number of boys, 47.6% were actually in farming, and 9.6% were engaged in agriculturally related occupations. Owners and renters made up 77.2%; 18.9% were in partnerships, and 3.9% were hired men. These figures were from a group of people who have had from 1 to 20 years of experience since graduation from high school. These are rather impressive figures, since ordinarily one-third of the students who complete a vocational study and become established in that vocation is considered very good.

Now, how does the Gladbrook, Iowa, Vocational Agriculture Department compare? First, this department was established in the 1954-55 school year, and second, we have graduated six classes since the vocational agriculture program was started. Following is a list of enrollments:

Year	Total boys in Hi. Sch.	Boys enrolled in vo-ag	% of total enrollment
1954-55	62	23	37
1955-56	54	29	53.7
1956-57	71	37	52.1
1957-58	87	37	42.5
1958-59	88	33	37.5
1959-60	80	30	37.5
1960-61	73	23	31.5

Many of the first classes had only one or two years of vocational agriculture. The cumulative enrollment of the department over the past seven years is eighty-seven boys. Forty-five have graduated with some vocational agriculture training. Forty

boys have taken as much vocational agriculture as they could before graduation.

Since 1958, sixteen boys have been graduated with the full four year

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Trenton Farmers Pioneer In

New Type Adult Class

W. T. LOFTEN, Teacher Education, University of Florida

An adult vocational agricultural class in marketing was organized at Trenton last fall for watermelon growers by Herbert Brown, teacher of vocational agriculture, Trenton High School. The Gilchrist County Board of Public Instruction approved the class and employed the teacher. Mr. Allen Poole, a major in agricultural education and agricultural economics at the University of Florida, was employed by the county school board to teach the class. The class met each week for 18 weeks, closing in February, 1961.

The purpose of this class of melon growers was to gain more knowledge of present-day marketing, consumer demands, the operations involved in marketing, the economic principles underlying a good marketing system, marketing facts available to farmers, and how marketing affects the whole farm operation and family living. This is one of the first adult classes of this type to be organized in the State and successfully completed.

During the eighteen two-hour regular

meetings a number of resource people were invited to assist Mr. Poole in teaching the class. The following are some individuals who appeared on the program and also acted as consultants: Dr. H. B. Clark and K. M. Gilbraith, Agricultural Economics Department, University of Florida; Dr. E. W. Cake, Marketing Specialist, Agricultural Extension Service, University of Florida; and Leonard Cobb, Gilchrist County Agent.

The class meetings were closed in February and, following the regular meeting, the members met and organized a "watermelon growers co-op." This Co-op will be known as the Trenton Area Melon Growers, Inc. with thirty-one charter members and approximately 2,000 acres of melons assigned to the Co-op. During the organizational meeting the members



Trenton, Florida, Adult Class

elected Charles Lindsey as president, D. D. Faircloth, G. C. Roberts, Edsel Mikell, Mervin Hines, Lee Roberts and J. C. Hutchinson as members of the Board of Directors. During the first regular business session Mr. B. G. Sparkman of Plant City was employed as sales manager for the Co-op.

Mr. Sparkman comes to the organization with several years experience in marketing. During the harvesting season he will have his office in Trenton where he can best serve the members.

Realizing the tremendous risk involved in growing tender crops and having experienced great economic losses in marketing their products, these men felt a need for keeping up-to-date and banding together to help solve their marketing problems. □

Vocational Agriculture — Progressing or Regressing?

program. Twelve boys have moved away before completing.

Of those boys who graduated and who could be traced at the time of writing, 55.5% were either engaged in farming or were in other related agricultural occupations. Seventeen, or 42.5%, were engaged in farming; 26.6% were in the mili-

tary service, and 17.7% were in college, or have taken some college work. Of course, there is some duplication here in that boys in college or service might also be included in the farming or related occupations group.

How are we doing? Are we paying our way in the Gladbrook Community School? I believe these figures

will prove that we are doing very well, not only in Gladbrook, but in all of Iowa, and these figures are very likely indicative of the programs to be found throughout the nation.

So don't sell the farmer short and he will continue to feed you as well if not better than in the past. □

FUTURE THEMES

AUGUST — Making Vo-Ag Broader Vocationally

SEPTEMBER — Materials and Methods

OCTOBER — Lay Participation

NOVEMBER — Impact of Industrialization on Vo-Ag

Involving People Helps

In Developing A "Climate of Understanding"

JOE P. BAIL, Teacher Education, Cornell University



Perhaps the phrase "Climate of Understanding" has been overworked and has become a "cliche" with many people. Nevertheless, it seems imperative that if agricultural education is to fulfill its obligation, an improved understanding of what agricultural education has to offer must be developed. This is not to say that we should "tell" more people about agricultural education, but rather that we should *involve* more people in the program of agricultural education. The principle to be observed here is that generally speaking, people support those programs which they understand and in which they are involved.

To bring the principle closer home, each of us is involved in different programs. Whether it is the United Fund, Boy Scouts, Community Improvement Association, or what have you, does not matter. If we understand and are involved, we give support in time, money, and effort.

Let's take a look at our own program in agricultural education. Certainly the teacher of agriculture is involved and we will assume "sold" on the program. But, how about the principal, the guidance counselor, other teachers in the school, the Board of Education, farmers, merchants, and parents of students? Are they sold on the program? Have they been involved in the program in a direct way? Perhaps they have. We certainly hope so. But if your program is going downhill, maybe you need to call on these groups rather than try "going it alone."

Ours is a complex society with many facets making up the whole. The days of isolationism in agricultural education—on both the high school and college level—are long gone. We must involve others in our program in direct ways if we are to develop a "climate of understanding" which will lead to support.

How can this be done? One step that can be taken by each of us in agricultural education is to acquaint our colleagues and fellow citizens with our program. This can be done only by communication and involvement in the program.

Some concrete suggestions, most of which are not new, are mentioned here:

—Invite your principal and guidance counselor to visit the farms of students when you are providing instruction.

—Use your principal, guidance counselor, and other teachers in activities of the agricultural department. Examples: FFA meetings, banquets, parent's night, speaking contests, etc.

—Involve representative groups in an Advisory Council. Give them something to do.

—Use local resource people, including merchants, professional persons, and others at appropriate times in your instructional program.

—Report regularly, through proper channels, to the Board of Education as to what is going on in the agricultural department.

—Develop rapport with the parents of students. After all, their children are the most important thing in their life.

Lastly, if we expect support for our programs, we must also support the programs of other departments in the school. Get to know and understand what the other teachers are doing. Perhaps they will find out that you—the teacher of agriculture—are interested in the total educational program and want to make your contribution to the development of better citizens in your local community, in the State, and in the nation.

Ours is a challenging profession. Let it not be said that we failed because we did not involve others in our program. Involvement can generate understanding which leads to support for a program. The opportunity

is ours to develop a program through involving people which will meet the needs for agricultural education in our times. □

BOOK REVIEWS

POWER TO PRODUCE, The Yearbook of Agriculture, 1960, by The United States Department of Agriculture. Published by the United States Government Printing Office and for sale by the Superintendent of Documents, Washington 25, D. C., 480 pp.; illustrated. Price \$2.25.

Many aspects of power as it is related to agriculture are covered in this book. All agricultural technologies are not covered, but a more limited and common view of technology is emphasized. Power, its application and control in various forms, the use of a growing variety of materials, and the improvement in technical processes to raise the productivity and efficiency of economic activities and to reduce their requirements of human labor, serves as the theme of the book.

The history of power, its potentialities, its physical effects and other pertinent attributes of power are treated in a very interesting manner. The subject should be of importance to everyone since it is a big part of the world we live and work in. The book should be a great aid in helping to develop understanding of our great power to produce, besides its practical values, and to help us better understand the complex situation of American agriculture. Excellent, well chosen, photographs spark the publication. The array of contributors have presented their materials in such a manner as to be very interesting and readable. This volume should prove to be a valuable addition to any library.

Guy E. Timmons,
Teacher Education,
Michigan State University

Studies in Progress in Agricultural Education

During 1960-61

North Atlantic Region

Compiled by C. W. HILL
Cornell University

- Awuku, Kwabena A., "A Proposed Program for Agricultural Instruction in the Middle Schools of Ghana." M.S., Agricultural Education Division, Cornell University.
- Bail, Joe P., "An Evaluation of Selected Instructional Materials Prepared for Use of Teachers of Agriculture in New York State." Non-thesis study, Agricultural Education Division, Cornell University.
- Beard, H. G., "Role Analysis in the Position of Teacher of Vocational Agriculture." Thesis, Ed.D., Agricultural Education Division, Cornell University.
- Bredderman, Theodore A., "A Handbook on Planning for Teaching Managerial Units of Instruction in Vocational Agriculture." Essay, M.Ed., Agricultural Education Division, Cornell University.
- Dillner, Fred D., "Appraisal of Methods of On-Farm Instruction of Young Adult Farmers in South Central Pennsylvania." Paper, M.Ed., Department of Agricultural Education, The Pennsylvania State University.
- Drawbaugh, Charles C., "Use of Greenhouse Facilities for Vocational Agriculture Instruction in Plant Science." Thesis, D.Ed., Department of Agricultural Education, The Pennsylvania State University.
- Edsall, Alan R., "A Study of the Drop-Outs at Milford Lakeview School." Paper, M.Ed., Agricultural Education, University of Delaware.
- Fout, Lawrence O'Dell, "What Materials Are Available in the Occupational Information File of High School Students Pertaining to Agricultural Education, Agriculture, and Vocational Agriculture?" Thesis, M.S., Agricultural Education Department, West Virginia University.
- Francis, Charles W., "Effect of College Training on Occupational Status, Graduates of College of Agriculture, University of Maryland, 1949-50." Thesis, M.S., Department of Agricultural and Extension Education, University of Maryland.
- Fuller, Gerald R., "The Development of a Self Report Instrument to Help Predict Student Teaching Success in Agricultural Education. Thesis, Ed.D., Agricultural Education Division, Cornell University.
- Greene, Kingsley L., "Employment Opportunities for Rural Boys in Selected Agricultural Occupations Related to Farming." Thesis, M.S., Agricultural Education Division, Cornell University.

Grimes, Melvin W., "Occupational Status of Former Students of Vocational Agriculture of the Russell Grove School, Amelia, Virginia, from 1951 through 1960." Paper, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

Jones, Robert C., "A Study Comparing the Degree to Which Training in the Skills, Knowledge, and Attitudes is Provided by the County Agricultural Schools and the High School Vo-Ag Departments in Massachusetts." Non-thesis study, School of Education, University of Massachusetts.

Legg, Otto P., "Automation and Capitalization Relationships in Decision-Making by Pennsylvania Farmers in Vocational Agriculture Classes." Thesis, D.Ed., Department of Agricultural Education, The Pennsylvania State University.

Lerew, Frank R., "Evaluation of Methods of Making Farm Machinery Investment Decisions Used by Farmers in the Shippensburg, Pa., Area." Paper, M.Ed., Department of Agricultural Education, The Pennsylvania State University.

Malone, Kenneth Marcellus, "The Pre-Service Training Needs in Farm Mechanics for Prospective Teachers of Vocational Agriculture." Thesis, M.S., Agricultural Education Department, West Virginia University.

McGarr, Thomas J., "The Factors and Sources of Information Used by Farmers in Deciding Whether to Build a Conventional Barn or a Loose Housing Arrangement for Dairy Cattle." Thesis, M.Ed., Agricultural Education Division, Cornell University.

Patton, William Preston, "Who Enrolls for Vocational Agriculture Courses in West Virginia?" Problem, M.S., Agricultural Education Department, West Virginia University.

Price, George H., Jr., "What Type of Farming Program Will Best Meet the Individual Needs of Pupils Enrolled in Vocational Agriculture?" Thesis, M.Ed., Agricultural Education Division, Cornell University.

Rogers, Charles H., "Factors Associated With Success As a Supervising Teacher in Agricultural Education Teacher Training Programs." Thesis, Ed.D., Agricultural Education Division, Cornell University.

Smith, Clodus R., "Why Agricultural College Students Who Are Not in Academic Difficulty Discontinue Their Education." Staff Study, Department of Agricultural and Extension Education, University of Maryland.

Stevens, G. Z. and McClay, D. R., "Graduate Credits Earned, Eligibility for Sabbatical Leave, and Advanced Degree and/or Certification Plans of Supervisors and Teachers of Agriculture." Staff Study, Department of Agricultural Education, The Pennsylvania State University.

Swecker, Edward Lee, "Characteristics of a Good Supervised Farming Program for Vocational Agriculture." Problem, M.S., Agricultural Education Department, West Virginia University.

Central Region

Compiled by WALTER T. BJORAKER
University of Wisconsin

Beckley, James R., "Public Relations Activities of Ohio Teachers of Vocational Agriculture." Master's Thesis, Department of Agricultural Education, The Ohio State University.

Bender, Ralph E., "Continuing Study of Vocational Placement of High School Graduates in Vocational Agriculture in Ohio." Special Study, Department of Agricultural Education, The Ohio State University.

Bentley, Ralph R. and Rempel, Averno M., "A Study of the Morale of Beginning Teachers." Staff Study, Department of Education, Purdue University.

Bentley, Ralph R., Rempel, Averno M., Remmers, H. H., and Rosen, Ned A., "Relationships Among Teacher Morale, Student Attitudes, and Student Achievement in Secondary Schools." Staff Study, Department of Education, Purdue University.

Bentley, Ralph R. and Rempel, Averno M., "Peer Rating vs Expert Judgment as a Means of Validating a Teacher Morale Measuring Instrument." Staff Study, Department of Education, Purdue University.

Bittner, Richard H., "The Relationship of Certain Characteristics to Student Survival in Selected Michigan Departments of Vocational Agriculture." Dissertation, Ph.D., College of Education, Michigan State University.

Bjorklund, Roland L., "Approved Practices Used by Successful Beef Feeders in the Estherville, Iowa, Area." Thesis, M.A., Department of Agricultural Education, University of Minnesota.

Blake, Duane L., "Relationship of High School Training in Vocational Agriculture to Subsequent Establishment in Farming and Participation in Farm Organizations." Dissertation, Ph.D., Agricultural Education Department, Iowa State University.

- Bohn, Gerhardt H., "Developing Teaching Techniques for On-Farm Instruction in Tractor Efficiency." Thesis, Ph.D., Department of Agricultural Education, University of Minnesota.
- Boucher, Leon W. and Finley, James R., "An Evaluation of Ohio's Vocational Agriculture Participation in Radio Programming with Implications for Future Activity." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Brown, Paul W., "Study of County Fair Premium Lists and Possible Improvements in County Fair Management." Non-thesis study, Department of Agricultural Education, University of Minnesota.
- Burt, Homer, "An Evaluation of Resource Units as a Teaching Aid in Vocational Agriculture." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Bryam, Harold M., "Michigan Phase of National Study of Young Farmer Education in Agriculture." Staff Study, College of Education, Michigan State University.
- Clover, Everett L., "Opportunities for Establishment of Young Farmers in Farming in the Webster City Community School District." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Coster, John K. and Kantner, F. L., "A Comparison of Social Relationships of Vocational Agriculture Students from Two Groups of Indiana High Schools." Staff Study, Department of Agricultural Education, Purdue University.
- Coster, John K. and Ruff, Eldon E., "The Relationship Between Teaching Load and Selected Aspects of Vocational Agriculture Instruction." Staff Study, Department of Agricultural Education, Purdue University.
- Coster, John K., and Ruff, Eldon E., "Variables Related to Farm Visitation and to Selection and Completion of Productive Enterprise Projects of Vocational Agriculture Students." Staff Study, Department of Agricultural Education, Purdue University.
- Coster, John K., "An Analysis of Personal Characteristics of Men Engaged in Agriculture in Three Selected Communities." Staff Study, Department of Agricultural Education, Purdue University.
- Coupland, Joe, "Minimum Essentials of a Good Vocational Agriculture Curriculum for High School Students." Dissertation, Ph.D., Department of Agricultural Education, The Ohio State University.
- Courtney, Elwood Wayne, "The Utilization of Human Resources in Agriculture: A Comparison of Ability Levels Required in Three Agricultural Occupations." Thesis, Ph.D., Agricultural Education Department, Purdue University.
- Denure, Charles, "An Analysis of the Role of Farm Mechanic Instruction in the Total Educational Offerings of Selected Wisconsin High Schools." Ph.D. Thesis, Department of Agricultural and Extension Education, University of Wisconsin.
- Emerson, Roy, "The Development of a More Formal Program of Training for Volunteer 4-H Leaders." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Fleck, Vincent J., "Evaluating the Size and Scope of Farming Programs." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Gadda, Hilding W., "An Evaluation of the Program of Teacher Education in Agriculture at South Dakota State College." Dissertation Ed.D., Michigan State University.
- Garner, Raymond A., "Attitudes of College Students Toward Instruction Received in Vocational Agriculture." Staff Study, College of Education, Michigan State University.
- Garner, Raymond A., "Scholastic Achievement in College of Former Students of Vocational Agriculture." Staff Study, College of Education, Michigan State University.
- Guiler, Gilbert S., "Practices Prevailing in Programs of In-Service Education for New Teachers of Vocational Agriculture." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Hanson, Leslie M., "The Programs of Vocational Agriculture Departments in Minnesota with Small Total Enrollment." Thesis, M.S., Department of Agricultural Education, University of Minnesota.
- Hayes, Roland J., "A Study of the Establishment of Young Farmer Groups by the Beginning Teacher." Non-thesis study, Department of Agricultural Education, University of Minnesota.
- Hemp, Paul E., "An Evaluation of F.F.A. Contest and Award Programs in Illinois." Staff Publication Study, Agricultural Education, College of Education, University of Illinois.
- Hiltebrand, Luther R., "Educational Needs of Employees in Wood-Products Industries in Fourteen Counties of South Central Missouri." Dissertation, Ed.D., Department of Agricultural Education, University of Missouri.
- Hogue, Hector M., "Contributions of the Veteran's On-the-Farm Training Program to the Hector, Minnesota, Community." Thesis, M.A., Department of Agricultural Education, University of Minnesota.
- Horner, J. T. and Ward, A. B., "A Study of Opportunities in and Education for Non-Farm Agricultural Occupations in Nebraska." Non-thesis, Agricultural Education Division, University of Nebraska.
- James, Kenneth E., "Influence of Vocational Agriculture on Farming in Chariton County with Implications for Adjustment." Dissertation, Ed.D., Department of Agricultural Education, University of Missouri.
- Jensen, Arnold, "Agricultural Instruction in Correctional Institutions." Thesis, M.S., Agricultural and Extension Education Department, University of Wisconsin.
- Jones, Clair, "A Follow-up Study in Mercer County of Graduates in Vocational Agriculture." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Kalangi, Christopher, "Factors Associated with Successful County Extension Advisory Committees." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Komasa, Noel J., "Ratings of High School Course Areas by Farm Male Graduates in Non-Farm Occupations." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Krebs, Alfred H., "High School Programs and Achievements of College of Agriculture Students." Staff Publications Study, Agricultural Education, College of Education, University of Illinois.
- Lamberth, Edwin E., "Why Tennessee Teachers of Vocational Agriculture Have Continued in the Profession." Non-thesis, Department of Agricultural Education, University of Tennessee.
- McCrary, J. Dean, "A Study of the Procedures and Practices That Have Been Effective in Developing and Carrying Out Programs of Vocational Agriculture for Adult Farmers in Kentucky." Non-thesis, Department of Agricultural Education, University of Kentucky.
- McCumas, James D., "The Organization of a Program to Enable Statistical Treatment of Data from One Hundred Bushel Corn Clubs." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Miller, Francis L., "Farming Programs for High School Vocational Agriculture Students with Limited Farming Opportunities." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Mugler, David, "Follow-Up Study of Former Vocational Agriculture Students in Dane County with Emphasis of Those Who Did Not Pursue Farming." Thesis, M.S., Department of Agricultural and Extension Education, University of Wisconsin.
- Nelson, Theodore M., "Factors Influencing Vocational Patterns of College of Agriculture Graduates." Thesis, Ph.D., Department of Agricultural Education, University of Minnesota.
- Newton, Melvin F., "Factors Influencing Occupational Choices of Farm Reared Male Graduates of Newton High School." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Norfleet, Morris L., "The Construction, Validation, and Use of a Model Instrument for Studying the Adequacy of Farm Landscaping and to Identify Variables Related to Variations in Homesite Beautification." Thesis, Ph.D., Agricultural Education Department, Purdue University.
- Oakleaf, Charles, "Evaluation of Work Experience Programs in Ohio and Selected States." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Oleson, James, "Pilot Study on Improving Attendance in Adult Farmer Programs in Agriculture in the Highland Community." Thesis, M.S., Agricultural and Extension Education Department, University of Wisconsin.
- Parrish, Joseph, "Implications for Curriculum Development in the Cadwell Schools." Master's Thesis, Department of Agricultural Education, The Ohio State University.

- Phipps, Lloyd J., "Young Farmer Education in Illinois." Staff Publication Study, Agricultural Education Department, College of Education, University of Illinois.
- Pumper, Fred, "High School Background and Student Success in the College of Agriculture at the University of Wisconsin." Master's Thesis, Agricultural and Extension Education, University of Wisconsin.
- Pynnonen, Oscar, "Comparative Study of the Guidance Function of Vocational Agriculture Teachers and the Officially Designated Guidance Personnel." Thesis, M.S., The Department of Agricultural and Extension Education, University of Wisconsin.
- Reed, J. O., "Factors Influencing Primary Vocational Patterns of High School Graduates." Thesis, Ph.D., Department of Agricultural Education, University of Minnesota.
- Rogers, Robert L., "Use of Credit in Developing Farming Programs of Ohio High School Vocational Agriculture Students." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Ruff, Eldon E., "The Development of an Instrument for Studying the Occupational Adjustment Problems of Young Adults." Thesis, Ph.D., Agricultural Education Department, Purdue University.
- Sahlstrom, Stanley D., "Factors Influencing College Attendance Plans of Capable High School Seniors." Thesis, Ph.D., Department of Agricultural Education, University of Minnesota.
- Santos, Bruno M., "A Study of the In-Service Training Programs for Teachers of Agricultural Schools of the Philippines." Dissertation, Ed.D., College of Education, Michigan State University.
- Schlottbeck, Paul J., "Improving Farm Shop Demonstrations." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Schmidt, Gerald, "Relation of High School Vocational Agriculture and Science to Achievement in the College of Agriculture." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Schroeder, Wayne E., "An Analysis of Production Project Record Keeping Practices." Dissertation, Ph.D., Department of Agricultural Education, The Ohio State University.
- Schroeder, Wayne E. and Coupland, Joe, "Educational Benefits of the Ohio Project Accounting System." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Sen, Raghubir, "Farm Mechanics Curricula for Preparing Teachers of Vocational Agriculture." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Sorensen, Fred A., "The Development of Teaching Units from Farm Business Analysis Data." Thesis, M.A., Department of Agricultural Education, University of Minnesota.
- Stuchel, Henry, "Relation of High School English and Mathematics to Achievement in the College of Agriculture." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Swanson, Robert M., "Opportunities for Establishment of Young Farmers in the Marengo, Iowa, Community." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Sweany, H. P., "Evaluation of Different Methods of Organizing and Teaching Farm Mechanics." Staff Study, College of Education, Michigan State University.
- Teske, Philip R., "The Education of the Farm Population in Indiana." Staff Study, Department of Agricultural Education, Purdue University.
- Teske, Philip R., "Are We Training Enough Future Farmers in Indiana?" Staff Study, Department of Agricultural Education, Purdue University.
- Teske, Philip R., "Selected Trends in Farming in Indiana with Implications for Program Planning in Vocational Agriculture." Staff Study, Department of Agricultural Education, Purdue University.
- Thompson, Fay A., "History of American Farmers from Wyoming." Thesis, M.A., Department of Agricultural Education, University of Minnesota.
- Uttech, Ralph, "Factors that Influence the Guidance of Male High School Students in Wisconsin Counties." Thesis, M.S., Agricultural and Extension Education Department, University of Wisconsin.
- Walker, Donald B., "The Opinions and Attitudes of School Administrators Concerning Vocational Agriculture in Minnesota." Thesis, M.A., Department of Agricultural Education, University of Minnesota.
- Webb, Earl S., "Establishment of Criteria for an Internal Examination of the Undergraduate Educational Courses Offered by the Department of Agricultural Education at the University of Missouri." Staff Study, Department of Agricultural Education, University of Missouri.
- Weir, Wilber, "Opportunities for Employment of Vocational Agriculture Graduates in Farm-Related Occupations in Medina County." Master's Thesis, Department of Agricultural Education, The Ohio State University.
- Wilson, Richard H. and Peck, Vincent J., "Man Work Units as a Comparative Measure of Farming Program Size and Scope." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Wilson, Richard H. and Guiler, Gilbert S., "The Development of a Guide for New Teachers of Vocational Agriculture." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Wilson, Richard H. and McComas, James D., "The Continued Development of the Crops Demonstration and Research Program in Cooperation with the Ohio Agricultural Experiment Station." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Wolf, Ray A., "The Utilization of Market Report Data from Farm Radio Programs by Farmers." Thesis, M.A., Department of Agricultural Education, University of Minnesota.
- Wolf, Willard H., "Vocational Preferences of Beginning Students in Agricultural Education." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Wolf, Willard H., "A Five-Year Comparison of Grade Performance of Agricultural Education Majors with Students in the College of Agriculture and Home Economics and the Entire University." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Wolf, Willard H. and Oaklief, Charles, "Status of Work Experience Programs in Ohio." Non-thesis Study, Department of Agricultural Education, The Ohio State University.
- Woodin, Ralph J., "Procedures for Supplying Extension and Experiment Station Bulletins to Teachers of Vocational Agriculture." Special Study, Department of Agricultural Education, The Ohio State University.
- Woodin, Ralph J., "Predicting Future Enrollments in Vocational Agriculture." Special Study, Department of Agricultural Education, The Ohio State University.
- Woodin, Ralph J. and Todd, Hollis, "An Evaluation of Teaching Procedures in Conducting Improvement Projects in Vocational Agriculture in Ohio." Non-thesis study, Department of Agricultural Education, The Ohio State University.
- Wyatt, Windol L., "Occupational Status of Former 'Chapter' and 'State Farmers' in the Iowa Association, Future Farmers of America." Thesis, M.S., Agricultural Education Department, Iowa State University.
- Young, Clair W., "An Analysis of the Participation Experiences of 4-H Members in Selected Counties in Ohio." Master's Thesis, Department of Agricultural Education, The Ohio State University.

Pacific Region

Compiled by S. S. SUTHERLAND
University of California, Davis

- Ahlstrom, John, "FFA Leadership Evaluation Based on College Activities." Thesis, Ed.M., Agricultural Education Department, Oregon State College.
- Aldrich, Glenn C., "Factors Influencing the Choice of Occupation by High School Senior Boys in an Agricultural Area of Washington." Thesis, M.S., Agricultural Education, Washington State University.
- Barbee, F. L., "An Evaluation of Facilities Provided for Vocational Agriculture Programs in the High Schools of the State of Washington." Supervisory Staff Study, State Board for Vocational Education.
- Brown, Bert L., "Present Occupations of American Farmers." Supervisory Staff Study, Washington State Board for Vocational Education.
- Brown, Bert L., "Present Occupations of State Farmers." Supervisory Staff Study, Washington State Board for Vocational Education.
- DeWitt, Melvin L., "A Study of the Methods Used and Importance of Teaching Livestock Health in Vo-

- cational Agriculture Classes in Idaho." Thesis, M.S., Agricultural Education Department, University of Idaho.
- Gardner, Max A., "Idaho School Administrators' Evaluation of the Vocational Agriculture Summer Program." Thesis, M.S., Agricultural Education Department, University of Idaho.
- Hall, Donald E., "Needs of In-Service Teachers of Vocational Agriculture in Technical Agriculture." Master's Report, M.Ed., Agricultural Section, Colorado State University.
- Halter, George A., "A Proposed Plan for an Adult Education Program in a One-Teacher Department of Vocational Agriculture." Thesis, Ed.M., Agricultural Education Department, Oregon State College.
- Holmberg, Donald R., "Factors Affecting Morale of Nebraska Teachers of Vocational Agriculture." Master's Report, M.Ed., Agricultural Section, Colorado State University.
- Johnson, R. Lyle, "Trends in Supervised Farming Programs in Vocational Agriculture of Eastern Washington Schools." Thesis, M.S., Agricultural Education, Washington State University.
- Juergenson, E. M., "The Contribution of the Student Teaching Experience to Certain Phases of the Development of Student Teachers." Non-Thesis Study. University of California, Davis.
- Juergenson, E. M., "Factors Affecting the Selection of a Career for Students Enrolled in Agriculture in High School." Non-Thesis Study. University of California, Davis.
- Kennedy, Norman L., "The Relationship Between Participation in Vocational Agriculture Programs, Other High School Courses, and Student Leadership in College." Thesis, M.S., Agricultural Education, Washington State University.
- Ladderud, N. Alf, "Agricultural Training Needs of Prospective Employees in the Dairy Industry of a Western Washington Area." Thesis, M.S., Agricultural Education, Washington State University.
- Lunde, Nuell C., "The Place of General Agriculture in the Public School System." Master's Report, M.Ed., Agricultural Section, Colorado State University.
- Magisos, Joel H., "Guidance Practices Followed in Selected High Schools With Prospective Students of Vocational Agriculture." Thesis, M.S., Agricultural Education, Washington State University.
- Merrill, Keith C., Jr., "A Suggested Course of Study in Farm Mechanics for Vocational Agriculture in Idaho High Schools." Thesis, M.S., Agricultural Education Division, Utah State University.
- Miller, Melvin D., "Principles of Organizing Adult Classes in Agriculture in Oregon." Thesis, Ed.M., Agricultural Education Department, Oregon State College.
- Nelson, Clifford L., "Factors Which Influence Boys to Enroll or Not to Enroll in Vocational Agriculture Classes." Thesis, M.S., Agricultural Education, Washington State University.
- Pederson, Olaf C., "Achievement of Former Students of Vocational Agriculture." Master's Report, M.Ed., Agricultural Section, Colorado State University.
- Perez, Jose A. C., "Status of Former Vocational Students in Puerto Rico." Master's Report, M.Ed., Agricultural Section, Colorado State University.
- Schoepp, Charley, "An Electricity Course of Study for Vocational Agricultural Students." Thesis, Ed.M., Agricultural Education Department, Oregon State College.
- Smyth, David L., "Attitudes and Opinions of High School Administrators Toward the Vocational Agriculture Program in Oregon." Thesis, Ed.M., Agricultural Education Department, Oregon State College.
- Stoddard, Robert L., "Dry Lot Compared to Pasture Feeding of Dairy Cows in Production in an Area of Limited Rainfall and Irrigation Water." Thesis, M.S., Agricultural Education Division, Utah State University.
- Sutherland, S. S. and E. M. Juergenson, "Biological Principles Related to Agriculture." Non-Thesis, Department of Agricultural Education, University of California, Davis.
- Thompson, O. E., "Guide for Developing Student Interest in Agriculture." Non-thesis Study, Department of Agricultural Education, University of California, Davis.
- Thompson, O. E., "Influences of Teachers of Agriculture upon Personal Values of Students." Non-Thesis Study. Department of Agricultural Education, University of California, Davis.
- Thompson, O. E. and W. M. Lawson, "Educational Needs of Workers in the Fertilizer Industry." Non-Thesis Study, Department of Agricultural Education, University of California, Davis.
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Is It Time to Specialize?

JAMES A. LOVE, Vo-Ag Instructor,
Chuckey, Tennessee

As a teacher of Vo-Ag I recently listed the different areas in crops, livestock, mechanics, soils, management and others which I am including in my teaching program. It came to some thirty items and I am sure the list was far from complete. I then began to wonder: Am I that good, or am I simply operating as a Jack-of-all-trades? Is that the proper location of the boundary line around my field of endeavor?

When I have an earache I don't go to a general practitioner any more but to a specialist. The same is true for an ingrown toenail, or the removal of a mole. When I take my car to the shop I find that one mechanic tunes the ignition, another does the lubrication and still another does nothing but install mufflers. In this and in other fields, people are finding that specialization brings efficiency. What should this mean to me as a teacher of vocational agriculture?

Recently our FFA Chapter participated in a public speaking contest. I think that is one of the most worthwhile contests ever undertaken. It is hard to conceive of anything more important to a young man than to be able to stand before a group and express himself. We can't question the value of teaching public speaking but at best, we can devote only a small portion of our time to aid students in this worthy endeavor. Our high school offers a course in speech arts to any

Counseling and conference techniques—

Student Teacher Supervision

RICHARD A. BAKER, Vo-Ag Instructor,
Tuskegee, Alabama



A supervising teacher in a high school department of vocational agriculture is in a key position to assist student teachers in agricultural education in the evaluation of their progress. This evaluation is best provided through counseling and conference sessions in regard to the participating experiences of the student-teacher.

Counseling and conference guidance are two terms heard frequently in the field of education. Broadly speaking, both terms include any type of assistance given a person in making adjustments, decisions and plans involving any problem.

Although the terms are well known and frequently used, there has been very little information published on counseling and conferences in the area of student-teacher supervision in the field of agricultural education.

student who wishes to enroll. Should I be competing with the teacher of that course, a teacher with special preparation in English?

Two years ago our supervised farming record book was revised. We now have a more comprehensive record book which necessitates additional time to teach. What shall I leave out in order to find more time for teaching record keeping? Again, we can't question the value of record keeping but our school also offers a course in bookkeeping. Where do I draw the line?

On my desk now lies a copy of the rules for the new soil judging contest. Having participated in such an event I am sold on its value as a teaching aid. What do I push out to make room for it?

As a youngster I used to play rook. At times the deck seemed too large for our hands so we took out all numbers below five. I wonder, are my hands again too full and do I need to do some discarding? How about you, fellow teacher? □

Counseling

The counseling process in student-teacher supervision involves an open, frank, and constructive talk between the supervising teacher and the student-teacher concerning the latter's teaching problem. The supervising teacher should be a helper, not an advisor or judge. Any technique which makes the student-teacher uncomfortable should be avoided.

The "non-directive" counseling approach will provide the best results in student-teacher counseling. The "non-directive" approach is very informal because it allows the student-teacher to control the interview. This approach can also be adapted to the amount of time available, to the nature of the student-teacher's difficulty and to the ability of the student-teacher to cope with his own problems.

The "non-directive" techniques to use in student-teacher counseling are:

- (a) Allow the student-teacher to do most of the talking. As a supervising teacher, encourage free expression of feeling and opinions.
- (b) Reflect the student-teacher's feelings by phrasing them in concrete expressions that he understands.
- (c) Direct the student-teacher toward the solution of his own teaching problem. Do not express approval or disapproval of a student-teacher or his statements.
- (d) Guide the student-teacher into recognizing that the responsibility for arriving at a satisfactory outcome rests entirely upon him.

Conferences

Conferences, both individual and small group, can be useful in the evaluation of student-teacher growth. They also promote friendly relationships between the student-teacher and the supervising teacher.

(Continued on page 18)

Building Electricity into the Vo-Ag Program

A. J. PAULUS, Professor and Subject Matter Specialist, University of Tennessee



Prompted by an effort to make his teaching on electricity more meaningful to the boys and adults in his classes, Roy Crabtree, teacher of vocational agriculture at Polk County High School, Benton, Tennessee, sought technical help and set up a permanent exhibit.

With the counsel and assistance of Mr. Earl Ware, public relations adviser, Volunteer Electric Cooperative, Mr. Crabtree set up the exhibit and developed a four-year teaching unit on electricity. The learning experiences provided begin with the basic principles of generating electric current and end with the complete wiring of an average farm home—all according to requirements of State and National codes.

On a vacant wall in his new farm shop, Mr. Crabtree set up a complete wiring unit beginning with a service entrance and home meter. To these



Class participation in wiring. Wall wiring is an elaborate teaching device installed permanently.

were connected a 100 amp fuse box and the wiring for the required number of circuits and special circuits for the home. A 60 amp and a 30 amp panel were run to the barn and pump house. All boxes and circuits were wired according to Underwriters' specifications. The complete unit is used for class instruction.

In addition to the main layout separate work units were made up of all circuits on the panel so that each student would get an opportunity to carry out first hand what he had observed in class. Sufficient materials are provided for student wiring prac-



Students doing actual wiring

tice in class. Other panels show the different inside and outside wire sizes, connectors, insulators and fuses.

In teaching this unit, Mr. Crabtree begins with classroom instruction using the book, "Electrical Wiring," (available at Sears, Roebuck & Co.,) as a reference. The class is then taken to the shop for further group instruction following through the panel on the shop wall. After that the class is divided into groups of three for the actual wiring of a circuit. All work is supervised and the finished product checked by the teacher.



Testing students' work



Wiring in switch box

The plan is to keep the understandings and practices alive during the students' entire period of enrollment in vocational agriculture. By making frequent reference to the wall panel and by special study in connection with the electric phase of all pieces of equipment studied, Mr. Crabtree is hopeful that the students will feel sufficiently secure to follow through on their own when no longer under his direct guidance. □



Instruction on reading a meter



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**THE AGRICULTURAL
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Problem Solving in Teaching

GEORGE W. WIEGERS, JR., Teacher Education,
University of Tennessee



In our daily experiences we encounter many kinds of problems or unsolved difficulties. Some of them we solve with dispatch, some require considerable time, study and thought and others go unsolved. From these normal experiences we can learn much of value in teaching students. Let us get the general picture of problem solving as it relates to teaching.

1. What it is:

Most teachers of vocational agriculture use real problem areas as their major units of instruction in organizing agriculture courses. Each problem area then is analyzed into smaller parts to help the students better understand what data they need to overcome difficulties within the problem area. The analysis may result in a list of questions relevant to the problem area. Teachers of vocational agriculture commonly refer to the list of questions as *problems*; actually they are sub-problems of a larger problem, the problem area. These sub-problems may take a form other than questions to be answered. For example, they may be developed as factors to consider in the problem area. If the difficulties to cope with are not stated as questions, they should be defined so that each student clearly understands what they are.

The problem solving processes used in teaching vocational agriculture embrace the selection of appropriate problem areas for inquiry, identification and definition of the sub-problems with the students, solution of problems and verification of results.

2. Reasons for using:

Problem solving is a common experience to students both in and out of schools. Because of this fact the major reasons for using problem solving processes in teaching are to develop student abilities in solving different types of problems and to find solutions useful to the student. One without the other leaves the student somewhat short of the learning essential to his intellectual growth

and satisfaction. The processes to be learned in solving problems and the satisfactory solutions sought become the students' immediate objectives.

Effective use of problem solving motivates the student to want to learn, helps him to identify real problems that need solving, builds confidence in him to solve problems for himself, helps to develop open-mindedness and stimulates creative thinking.

There are other values in addition to the foregoing such as the following:

- a. Facts and evidence are used functionally in arriving at conclusions useful to the student.
- b. Problems defined will give direction to study and learning.
- c. Problems are so varied that techniques used to solve them provide many opportunities for flexibility in teaching.
- d. Students can participate in all the steps or phases of problem solving.
- e. Use of problem solving in teaching frequently gives the teacher new insights for teaching.
- f. If results are forgotten, they may be thought out again in most cases more easily than the first time.

3. Limitations in using:

Many of the things students need to learn may be learned through more practical means than problem solving. Examples would include the developing of appreciations and attitudes, developing many manipulative abilities, understanding present situations or the status of things, applying some knowledge and skills, and the like. Some things must be memorized and problem solving would probably contribute little to this kind of learning. Also, the evaluation of student learning indicates that students may get solutions to problems, but still lack adequate understanding of facts and relationships.

Today many students work in the classroom on real farm problems originating in some outside situation,

but for many of the students enrolled these so-called problems are actually artificial problems unless the teacher manifests considerable genius in relating them to other useful work. To illustrate, many students now enrolled in vocational agriculture classes are not farming and will not farm later; therefore, they do not actually face difficulties or perplexities in connection with farming operations. The questions they answer on farming must be justified on the basis of other agricultural work both in school and out.

There is danger of stultifying the learning process if teachers try to make a problem of every teacher-learning situation.

4. When to use:

In teaching, problem solving may be used effectively when the students need solutions to problems. The following illustrates types of thought-provoking questions or problems used in teaching: (1) a decision to be made, (2) a choice of different ways of performing an act, (3) a goal to be determined, (4) a conclusion or inference to be drawn, (5) an analysis to be made, (6) a solution to be sought, (7) a relationship to be found, and (8) a gap to fill in an experience. The foregoing types of problems raise different kinds of questions to be answered.

5. Place and size of group:

Problem solving may be used effectively in the classroom, agricultural mechanics shop, on a field trip, on the farm, or wherever students with difficulties or problems meet for educational purposes.

The process can be used with one student or one hundred, depending upon circumstances. If students need close supervision in arriving at acceptable solutions, the number must be adjusted to what the teacher can supervise adequately. Students must have access to evidence or data that will help them to develop answers to questions. Limited access to data would influence the number of students that can be supervised effectively at one time.

6. How to prepare:

Prepare adequate teaching plan. In thinking through the problem area, the teacher should reach tentative decisions on these items: teaching objectives or what the students are expected to learn, means of developing the situation to give the problem

area a setting, suggested problems,¹ methods of procedure for solving problems, and other preparations as needed.

Make other preparations that might be helpful. There follow some suggestions that can contribute to "readiness to teach": think of ways to get students to become conscious of difficulties they did not know they had or that existed; create ways to raise questions in the minds of students to stimulate real reflective thinking; if references are needed, have them ready before class meets; if a film is to be shown be sure to have all materials ready for immediate use; and if a field trip is to be taken, make the necessary arrangements and preparations in advance of the trip.

7. How to conduct:

Teachers must recognize that problems selected for group inquiry may be solved by different means. Many procedures, techniques, aids, and devices are used effectively by teachers and students in helping solve different types of problems.

A general simplified method is presented. Teachers must be cognizant of the fact, however, that it is impossible to use one prescribed method of attack for all problems. The following steps are logical steps but are not necessarily to be followed serially in solving even the simple problems.

- a. State the problem area.
- b. Identify problems or questions to be answered in the problem area.
- c. Search for evidence or data which may help answer the questions raised.
- d. Solve each problem which was identified and accepted.
 - (1) Have each student develop or find his own possible solutions. He may first have to become familiar with specific methods of overcoming the difficulties and then analyze alternative solutions where alternatives exist.
 - (2) Next, have the students share possible solutions in a recitation² or group discussion.
 - (3) Then have the students refine their individual solutions or arrive at common solutions.
- e. Verify solutions by authority (evidence, teacher, etc.) experience, practices, performance and/or experimentation.

8. How to check results:

There are many points or places where a teacher can check his progress and results in teaching by the problem solving processes. Some check points are as follows:

- a. Analyzing situations giving rise to questions to be answered.
- b. Clarifying student goals.
- c. Identifying specific problems to be solved.
- d. Relating student experiences to the problem area.
- e. Studying during the study periods.
- f. Analyzing and classifying evidence found.
- g. Arriving at solutions to problems from experiences and other evidence.
- h. Making further plans and applications.
- i. Verifying conclusions.

In drawing upon the foregoing check points, these evaluation techniques may be used effectively: pencil and paper tests, informal observations, records of activities, questionnaires, performance and others.

The processes used in solving the many problems which arise in vocational agriculture classes are systematic and not "hit or miss" propositions. Further, they are psychologically sound because they follow the normal pattern of satisfying human needs. □

¹Problems may be formulated by teachers for students and still be real problems of students.

²If all students have the same questions to answer, use the same references, and there is no feeling on the part of the person responding that he is making a contribution to what the other members of the class have learned, the process is a recitation rather than a discussion.

Student Teacher Supervision . . .

(Continued from page 15)

Conferences should be carried out as a cooperative process. They should serve as a connecting link between the teaching activity and the summarization of experiences. They should also be planned to assist student teachers in self-evaluation and self-direction.

The Counseling and Conference Program

The planning of a counseling and conference program rests with the supervising teacher. It must be preceded by careful study of the student-teacher and the over-all student teaching situation.

Setting up a counseling and conference program will involve providing assistance in the following areas:

- (a) Development of a basic philosophy of education and instilling in the student-teacher a concept of quality education through practical experiences.
- (b) Planning of total experiences for the student-teacher in terms of professional and personal needs.
- (c) Planning for effective teaching in the area of subject matter.
- (d) Solving problems in classroom management.
- (e) Building good lesson plans and learning how to use them successfully.
- (f) Discussion of discipline relationships in regard to the teaching process.
- (g) Discussion of teaching methods based on sound principles of learning.
- (h) Evaluation of student teaching.
- (i) Discussion of relations in regard to the customs and values of the school and community.
- (j) Discussion of observations made by the student-teacher during the teaching activity.
- (k) Discussion of plans for subsequent employment.

Counseling and conferences yield mutual understanding when properly conducted by the supervising teacher. The nature of the conversation should be developmental; that is, building ideas, exploring possibilities and arriving at agreements that will be advantageous to the student-teacher. □

WELCOME

to all beginning
teachers.

We sincerely hope
that your career
will be long and
fruitful.

Building a Program of Vocational Agriculture

Community Needs Are Basic to a Sound Program

DONALD THOMAS and AARON BEALS,
Teachers of Agriculture, Temple Hill High School,
Glasgow, Kentucky

We started on the job as co-teachers, in a going department, on the same day. Mr. Beals had done one year of teaching vocational agriculture in another school. Starting off together in the Temple Hill Community caused us to plan and coordinate our work together.

A Sound Course of Study Is Basic

We made a careful study of the community to determine the agricultural needs. The first part of this study had to do with making a 50-farm survey. This survey helped us determine: the type of farming; the crops grown and yields secured; the major livestock enterprises in the community and production secured; kind and amounts of fertilizer used on the various crops; income of farm-

ers; farm machinery and equipment being used; and modern conveniences in use on the farms. Along with a tabulation of this information, the departmental records, and agricultural census information, we "tailor made" a four-year course of study for the Temple Hill High School. This course of study was developed during a three-week course at the University of Kentucky. Teaching objectives were carefully selected on the basis of need for each subject or enterprise to be dealt with. The subjects and areas to be dealt with and number of days devoted to each, by years, are shown in the 4-year block-out below.

TEMPLE HILL HIGH SCHOOL (4-year block-out)

Ag I	
Supervised Farming	40
Farm Mechanics	30
FFA	12
Field Crops	
Soil in relation to crops	23
Tobacco	35
Corn	15
Individual Problems (2nd Sem.) ..	10
Total Days	165

Ag III	
Supervised Farming	30
Farm Mechanics	25
FFA	8
Soils and Land Use	64
Pastures	20
Individual Problems	18
Total Days	165

Ag II	
Supervised Farming	39
Farm Mechanics	30
FFA	12
Farm Animals (Dairy)	
Kind and number	4
Selecting	6
Breeding	8
Feeding	35
Care and management of the young	6
Control of parasites and diseases	7
Individual Problems	18
Total Days	165

Ag IV	
Supervised Farming	30
Farm Mechanics	30
FFA	10
Farm Management	45
Pastures (Continued)	10
Advanced Feeding of Dairy	
Cattle	22
Individual Problems	18
Total Days	165



Here we are showing the principal our four-year course of study for the department. We also discussed with him our plans for the young- and adult-farmer programs. He offered helpful suggestions.

Planning With the Principal

Immediately after completing the course of study at the University and going on the job July 1, we sat down with our principal and discussed with him what we were setting out to accomplish and asked for his suggestions. He was impressed with our course of study and plans for the year. He offered helpful suggestions.

We decided to work closely with each boy (and his parents) individually so that we could guide him to select and plan a good farming program adapted to the home farm and one that would be balanced—to include a cash crop, a livestock project, and a feed-crop project to feed the livestock. We also set a goal to get each boy to have an improvement project of good scope and to carry out a selected number of supplementary farm practices. We agreed to place emphasis on securing purebred or high-grade dairy animals which had high-producing ability. The principal was enthusiastic about the plans and goals in supervised farming. This meeting together made all of us a part of the plan.

Getting Acquainted

After having the conference with our principal, the next job was to get acquainted in the community. For the first two weeks we traveled together meeting the boys and their fathers and, in most cases, the mothers. After this we visited individually the students we would have in our high-school classes starting in September. By the time school started, we had visited each high-school vo-ag student twice and each prospective student at least once. In addition, we got a "line-up" on many good pros-



The bank president was eager to help our students finance their farming programs. Mr. Sam Sears, the bank president, is going over with Douglas Belcher his plans for a farming program. His loan was approved for \$500.



This is Robert Spears, one of the high-school students who purchased several good Holstein cows during the year. He secured a loan from the local bank for financing the purchase.

pects for our young- and adult-farmer classes.

Starting Classes— Farming Program Basis

A good portion of our time the first six weeks of school with all classes was spent in developing an understanding of what a good farming program is and the importance of having a good program. As a result of this effort and working with the parents and the boys on their home farms, we were able to get 98 percent of our boys with complete farming programs—a cash crop project, a livestock project, one or more feed-crop projects, and an improvement project. Supplementary farm practices were added during the year.

The farms in Temple Hill Community are small and diversified, with tobacco being the main cash crop. Most farms were adapted to dairying, so we pushed dairying.

Working With the Local Bank

After considerable interest had been stimulated in dairying, there arose the need for financing the livestock projects. The farm adviser of the local bank agreed to make loans to individual boys for financing their livestock projects. Each boy who secured a loan made his own arrangements with the banker. Each boy made his contact with the banker, taking along his Record and Plans Book which he went over with the banker. Each boy showed the banker his plan for paying off the loan. All of our recommendations were approved.

By the end of the first 11 months,

our boys had bought 36 registered or high-grade dairy animals and had borrowed over \$2,300. The bank lends the money at 6 percent and returns 4 percent to the chapter annually, at the Father and Son FFA Banquet.

Young Farmer Program

There were eight young farmers enrolled in class when we went on the job. Thomas assumed responsibility for the young farmer work. He proceeded to work with the eight members enrolled and contacted 14 additional potential young farmers. Of this number, he got ten good young men to enroll in the young farmer class. After losing two of the original eight, this gave him 16 young farmers.

The group decided that the intensive course should deal with tobacco. In addition to the regular classroom sessions, we visited several farms during plant-bed preparation and during the stripping season.

Of the 16 members enrolled, 12 attended over 70 percent of the 16 meetings of the intensive course. With 49 boys in high-school classes, careful planning for supervision was a must. Each young farmer was provided with four supervisory visits during the year.

The class organized a young farmer chapter and affiliated with the Kentucky Young Farmer Association in June of 1960. The class now includes 18 active members and four associate members.

Adult Farmer Program

A complete program of vocational agriculture includes instruction for

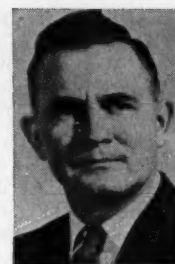
adult farmers. Believing this to be a fundamental truth, Beals set about to determine the needs of the adult farmers in the school district. As we visited farmers individually and talked with them regarding their problems and difficulties, it was decided that the intensive course should deal with dairying. Dairy farmers were recruited for the course. The list of things to be dealt with in dairying was set up at the meeting. Also, the dates and hour the class would meet were agreed upon. Fourteen adult farmers were enrolled. During the time the class was in session, each member was visited twice. This helped to keep Beals close to each farmer's problems and also helped to create a mutual and cooperative relationship between the teacher and the farmers.

Other Accomplishments and Future Plans

We placed second in the District Soil Judging Contest. Our ratings in farming achievement were five superiors, five excellents, one good, and three fairs. We have learned a lot and are proud of our accomplishments. We are shooting for better farming programs with more emphasis on quality and scope of livestock projects, with high-yielding quality feed-crop. We believe we can increase considerably the number of dairy animals on the farms in the community and that we can increase the average production per cow by several hundred pounds. Along with this, we feel confident we can improve the yield and quality of the pastures. We believe our program is agriculturally sound, and to this end we shall devote our efforts. □

Why Vocational Agriculture in the Modern High School?

CLAXTON R. COOK, Teacher Education, Oklahoma State University



The major purpose of vocational agriculture is to assist students in developing an integrated personality. An integrated personality is one that has taken its various experiences and compiled them into an understanding whole, with each component part influencing the individual's personality respective to its value in assisting the individual toward maturity. An understanding of the world around us provides for greater appreciation of experiences and promotes a desire for more challenging opportunities that help us understand ourselves, thereby providing avenues where maturity is more readily acquired.

Vocational agriculture utilizes as its source material the so-called "solids" such as: mathematics, English, science, geography, physics, history, etc. These solids are fundamental to our culture as they express a logical accumulation of related concepts and ideas. Within themselves and individually the solids are of little value except as tools to solve other problems or show relationships within our universe.

Vocational agriculture combines these basic, logical, cultural accumulates into an understanding in helping students solve problems imposed upon them by the orderly process of mother nature. When a student studies the feeding of cattle, mathematics is employed in calculating a balanced ration; English is utilized when writing to a commercial concern and asking for related information; science is employed to give meaning to students studying the digestion process; civics is further understood when health laws are called upon to give more clearly defined ideas in various areas; geographical locations are a related factor in marketing; and history aids in intelligent marketing processes. Employing all these factors in solving complex problems in our society demands mastery and understanding of the basic solids. The student's appreciation and understanding of the relative significance of gaining the fundamentals is greatly

enhanced once he has been challenged to solve a problem, imposed upon him by mother nature, which demands efficiency in the "solids."

Our capitalistic form of government promotes vocational aspirations early in life. The relationship between knowledge and understanding is narrowed when one feels the need for using the facts within the situation. Providing a study that emphasizes relationships in the American capitalistic way challenges the student to greater self-discipline and desire for proficiency. The student begins to readily integrate his personality so that maturity is a natural sequence to a greater appreciation and understanding of the universe around him.

Another major contribution of vocational agriculture in developing an integrated personality is the appeal that the subject makes to students of varied intellectual abilities. Mother nature's laws are so simple, in many respects, that students of limited abilities can understand relationships and develop a feeling of pride and worth as a result of accomplishing desired objectives. The nature of the same has other aspects that challenge students of higher levels in their abilities by the problem's complexity. All students should have some formal study in which those of varied levels of abilities work together. In studying together they learn toleration and respect for others. Students of high level abilities soon develop a helpful attitude and learn to assist others in their endeavors. We must always remember that continuity of democracy gives each man one vote at the polls. Vocational agriculture is a melting pot for these variations, and all degrees of abilities are challenged to achieve their utmost if a feeling of worth is acquired by each individual. The recent national emphasis on intellectual values may possibly promote a governing class of people who do not understand nor appreciate the problems of the masses if this emphasis is continued over a period of years. Direct associations in learning

situations provide an avenue for toleration and respect for people with varied intellectual abilities.

Opportunities in leadership provide expression in human relations, and ability to communicate becomes effective. Ownership of a supervised farming program brings meaning relative to financial ventures. Responsibility for decision-making is experienced in group processes. Cooperative projects assist in understanding others and promotes mutuality of feeling and respect for our fellow man.

The integrated personality thus becomes one that understands and appreciates relationships of various experiences which reveal new ideas and concepts. These new ideas continually add maturity and growth to the individual as his quest for more and greater complexity of problems is appreciated and challenged. □

BOOK REVIEWS

POULTRY PRODUCTION by Bundy and Diggins. Published by Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

This book gives some basic principles in the selection of poultry breeds and the production and marketing of poultry and poultry products. It is written in language that high school students in vocational agriculture can readily understand.

This type reference should be of tremendous help to a student in outlining and planning his poultry projects. It will serve as a guide in analyzing the enterprise into study jobs and determining practices to follow in carrying out his program. In preparing the book, the authors secured the assistance and advice of many outstanding authorities on poultry production.

Clarence E. Bundy is Associate Professor of Agricultural Education at Iowa State University, and Ronald V. Diggins is Vocational Agriculture Instructor at Eagle Grove, Iowa.

W. T. Lofton,
Associate Professor,
University of Florida

READINGS IN THE HISTORY OF AMERICAN AGRICULTURE edited by Wayne D. Rasmussen. The University of Illinois Press, Urbana, 340 pp., illustrated. Price \$6.50.

This book, on the history of American agriculture, begins with the colonial days and discusses the development of agriculture up to the present. The development of improved methods and techniques of farming are documented, starting with the transfer of European agricultural practices and practices learned from the American Indians.

The book describes completely the evolution of the political, social, and economic changes that have brought about a gradual improvement in farming. The effects of industrialization and increased foreign demand for American farm products, leading to a shortage of farm labor and the adoption of new machines and techniques, and the development of improvements in agronomy and animal husbandry are also discussed.

The picture of why and how American agriculture has been moving from the self-sufficient, independent farmer and subsistence farming predominant for many decades to commercialized agriculture and specialized farming which is now expanding at an ever-increasing rate is portrayed. The increasing responsibility of the Federal Government in improving the economic conditions in agriculture is also included.

This book will be a valuable reference to anyone interested in studying the amazing evolution of American agriculture. It is divided into eight sections covering clearly defined periods in the development of American agriculture and includes 52 selections that highlight the important land marks in its history. A chronology of American agricultural history and suggested selected readings are presented in the back of the book.

Wayne D. Rasmussen is an agricultural historian with the U. S. Department of Agriculture. He is also Secretary-Treasurer of the Agricultural Historical Society.

Carl Lamar,
Teacher Trainer,
University of Kentucky

BEEF CATTLE PRODUCTION by Kenneth A. Wagon, Reuben Albaugh, and George H. Hart. The Macmillan Company, New York. Price \$8.50.

This text presents a complete coverage of the many facets of the broad and complex subject of beef production. It contains the latest information on economics, breeding, hereditary abnormalities, feeds, feeding, nutritional deficiency diseases, pasture and range management, handling and feeding equipment, and marketing. Both sides of controversial subjects are presented and the important data are documented.

The book is written in simple language and is well illustrated, containing 38



tables and 120 figures and pictures. It includes research work as well as methods successful cattlemen are employing in conducting their business. The book further suggests improved systems that, if incorporated in management practices, should promote greater efficiency in production.

Mr. Wagon is Specialist in Research, Department of Animal Husbandry, University of California. Mr. Albaugh is an Extension Specialist in Animal Husbandry and Mr. Hart, late Dean of the School of Veterinary Medicine, also of the U. of California.

Harold R. Binkley,
Teacher Trainer,
University of Kentucky

AGRICULTURAL FINANCE by William G. Murray and Aaron G. Nelson. The Iowa State University Press, Ames, Iowa, revised edition, 471 pp., 1960.

This is the fourth edition of a well-written book on agricultural finance. Part I is devoted to the principles of agricultural finance and consists of 16 chapters. These chapters are devoted to such topics as classification of farm credit, risk-bearing in using credit, credit instruments, interest rates, buying a farm on credit, acquiring capital to farm, and repayment capacity as a guide for use of credit. Part II is devoted to analysis of the different lending agencies and includes chapters on the different sources of credit including both long- and short-term credit. The book also has some pages on guide-lines to use in buying a farm. Information is included on the kind of farm to buy, price to pay, amount to pay down, and the steps in making the purchase.

Teachers of vocational agriculture need a book of this kind to use in preparing lessons for high-school boys, young farmers, and adult farmers. Several copies of this book could be used to advantage as a reference for students in vocational agriculture. It could also be used to supplement farm management textbooks.

William G. Murray is professor of economics at Iowa State University, and Aaron G. Nelson is professor of agricultural economics at the University of Arizona.

William Judge, Supervisor,
Agricultural Education,
State Department of Education
Frankfort, Kentucky

FREEDOM TO FARM by Ezra Taft Benson. Doubleday and Company, Inc., Garden City, New York, 239 pp., 1960. Price \$3.95.

This book is written primarily as a source book for people interested in the farm problem rather than as a college or high-school text.

The author's main thesis is that the government should get out of agriculture. In this book he attempts to tell why. He contends that farm supports and controls have caused the farm problem to become a great national problem.

The book is divided into fourteen chapters which give an account of the farm question since the early 1900s and the thoughts of the author as to what should be done now and in the future to improve the agricultural situation.

The book is easy to read and presents a controversial but important point of view by a leading figure of our time.

Mr. Benson, Secretary of Agriculture during the Eisenhower administration, states that farming, service to agriculture, and church work have been the continuing dominant themes of his life.

William Bingham,
Teacher Trainer,
University of Kentucky

BEEF PRODUCTION AND DISTRIBUTION by Herrell DeGraff. The University of Oklahoma Press, Norman, Oklahoma, 252 pp., illustrated, 1960. Price \$5.00.

This is the report of a study of the economic aspects of beef production and marketing made with the assistance and cooperation of the Fact-finding Committee of the American National Cattlemen's Association. It deals almost entirely with marketing and economics, only barely touching the production practices of beef cattle.

The book gives a thorough economic picture of the beef cattle segment of agriculture in the United States. (One chapter also deals with foreign trade in cattle and beef.) Selected chapter titles include beef cattle in American agriculture, the cyclical nature of the cattle industry, the feeding industry, the demand for beef, the marketing system, and better beef for a bigger market.

The book contains several photographs, 31 charts, and 43 tables. These are of much help to the reader in understanding the economic aspects of the beef cattle industry.

Dr. Herrell DeGraff is a professor at Cornell University, Ithaca, N. Y.

George L. Luster,
Teacher Trainer,
University of Kentucky

News and Views of the Profession



**Richard
Edward
Bass**

Richard Edward Bass, Director of Vocational Education, State of Virginia, died February 19, 1961, in a Richmond hospital. Mr. Bass had served in the field of public education for nearly 31 years.

A native of Lunenburg County, Mr. Bass was educated in the public schools of Charlotte County, was a graduate of Virginia Polytechnic Institute in agricultural education, and received his master's degree in school administration from the University of Virginia.

He was instructor of vocational agriculture at Chilhowie High School from 1929 to 1939. From 1939 to 1941 he served as supervisor of shop and construction projects and assistant administrator for the National Youth Administration. Later he was appointed assistant director of the Food Production and War Training Program. In 1946 Mr. Bass was appointed assistant state supervisor of vocational education and in 1951 became state supervisor of vocational agriculture. He was appointed state director of vocational educational in 1958.

Mr. Bass was national treasurer for the Future Farmers of America. He was a past president of the American Vocational Association and had served as its vice president for three years. In 1957 he was named Man of the Year in Agriculture in Virginia, and in 1959 he received the Outstanding Service Award of the American Vocational Association and the Honorary American Farmer degree of the Future Farmers of America.

He was a member of the American Vocational Association and the National Vocational Agriculture Teachers Association. He was also a member of the Richmond Rotary Club. Mr. Bass was an honorary member of the Young Farmers of Virginia, the Virginia Association of Distributive Education Clubs of America and the Virginia Association Future Homemakers of America.

He was a member of the First

Presbyterian Church and taught an adult class for many years.

Throughout his career Mr. Bass worked constantly to improve educational opportunities for rural youth.

Changes in the Magazine Staff

Taft—Special Editor for North Atlantic Region



Jesse A. Taft of Massachusetts has accepted appointment as one of the special editors for the AGRICULTURAL EDUCATION MAGAZINE in the North Atlantic Region. He replaces Wallace Elliot of Maine.

Taft was reared on a dairy-fruit combination farm in Medon, Massachusetts (Worcester County). He received a B.S. degree from the University of Massachusetts in 1930 and an M.S. degree from the same institution in 1948. After four years as a teacher of vocational agriculture at Arms Academy, Shelburne Falls, he established a department at Barnstable High School on Cape Cod where he taught for seven years.

Between 1941 and 1946 he served in World War II with overseas duty in the Mediterranean-African Theater as an Ordnance Corps officer. For one year he served as Agriculture officer with the Allied Control Commission in Italy. While on this assignment he assisted the Ministry of Agriculture with the amassing of olive oil for which he received a commendation. Presently he holds a rank of Lt. Colonel in the Army Reserves.

Between 1946 and 1960 he has served as Supervisor of Agricultural Teacher-Training at the University of Massachusetts. In December, 1960 he was appointed as Senior Supervisor of Agricultural Education with an office in Boston.

Presently he is serving a two year

term as Trustee of the National FFA Foundation. He is a member of Phi Sigma Kappa, AVA, MVA, MVATA, and the Massachusetts Vocational Agriculture Teachers Association.

Taft has two sons and six grandchildren. □

SCARBOROUGH ON MAGAZINE STAFF

Cayce C. Scarborough, Head of the Department of Agricultural Education, North Carolina State College, Raleigh, has been appointed as Special Editor for the Southern Region representing North Carolina, South Carolina, Virginia, and Florida.

Dr. Scarborough is a native of Alabama, received his B.S. and M.S. degrees in agricultural education at Auburn University, and received his Ed.M. and Ed.D. degrees at the University of Illinois.

Scarborough served several years as a teacher of vocational agriculture in Alabama, including the duties of supervising teacher for student teaching. He was appointed district supervisor, executive secretary for FFA, and teacher trainer in Alabama.

He has been a frequent contributor to *The Agricultural Education Magazine*, the *AVA Journal*, *Better Farming Methods*, *County Agent-Vo-Ag Teacher*, and *Adult Leadership*. He has published two books: *Southern Hog Growing*, Interstate Printers and Publishers, 1959, and *Fruit Growing*, with G. W. Schneider, Prentice-Hall, 1960.

At present he is a member of several professional organizations, including the American Vocational Association, Adult Education Association, AAUP, NEA, NVATA, AATEA, North Carolina Vocational Association, and North Carolina Vocational Agriculture Teachers Association.

Cayce and Margaret Scarborough have two daughters, Sue and Nancy, and a son, Saxon.

Stories in Pictures



Sylvia Lee, Washington State Executive Advisor, Future Homemakers of America, looks on, while Bert L. Brown, Chief Supervisor of Agricultural Education, receives the Honorary Future Homemakers of America Award from Marianne Andrews, Chief Supervisor of Home Economics Education. Bert Brown is one of five men who have been awarded Honorary Membership in the Washington Association of Future Homemakers of America for their contribution in promoting FHA at local, regional, and state level.



William Powers, President of the New Hampshire Agriculture Teachers Association, is shown demonstrating one of the experiments used by New Hampshire Agriculture Teachers in teaching farm electricity. Alfred Conner, center, Secretary-Treasurer of the New Hampshire Agriculture Teachers Association and Emery Booska, Teacher of Agriculture at Hudson, N.H. and host for the electrical workshop, are shown studying Mr. Powers' procedure. Picture was taken during the electrical demonstration panel workshop held recently in Hudson, New Hampshire, and attended by nearly all New Hampshire Agriculture teachers.



Willard Eberly, member of the Turner Ashby FFA Chapter, Dayton, Virginia, and the 1961 national winner in the National Turkey Federation youth achievement award, displays the plaque presented to him at the Chicago NFT convention. He also received a \$500 college scholarship. His FFA advisors, R. C. Cupp and R. Z. Arey look at the trophy.



A local lumberman of Miller, South Dakota, explaining his business operation to the Miller FFA chapter. Local businessmen are often used at regular FFA meetings. This helps farm boys understand the opportunities and problems in the businesses represented.



Minnesota FFA president, Sherwood Knutson of Canby on the extreme left and Princess Kay of the Milky Way, Marilyn Christianson, on the right drinking a toast to the National FFA officers at a reception in their honor during their Good Will visit to Minnesota.

